

REMARKS

Claims 1-20 are pending in the application. Independent Claims 1 and 11 have been amended. No new matter has been introduced.

Claims 7 and 17 have been amended to correct spelling errors. Specifically, the term “complied” has been replaced with the term “compiled” in both claims 7 and 17. Acceptance of these amendments is respectfully requested.

Claims 1-20 were rejected under 35 U.S.C. §112, second paragraph, because the term “the functions” in lines 5 and 12 of Claims 1 and 11 as originally filed lacks antecedent basis. Claims 1 and 11 have been amended by replacing the first instance of the objected term “the functions” with the term “the function objects.” The second instance of the term “the functions” has been replaced with the phrase “the expressions within the function objects.” These amendments are fully supported by the specification as originally filed at page 11, line 20 through page 12, line 4. Since Claims 1 and 11 as now amended have antecedent basis, Applicants respectfully request that the §112 rejection of these claims be withdrawn. Moreover, since Claims 2-10 depend from Claim 1 and Claims 12-20 depend from Claim 11, Applicants respectfully request that the §112 rejection of Claims 2-10 and 12-20 be withdrawn.

With the present invention, Applicants provide access control for an emergent model of a system distributed across a computer network. The emergent model consists of one or more models where a model consists of one or more objects. Specification, page 8, lines 6-7. The models are collections of computer instructions and data that present an interface for describing the behavior of part of the system being modeled, such that the interface is understood by other parts of the system being modeled. Specification, page 8, lines 3-5. Some of the objects are model inputs and outputs made available to relate various models to one another. Specification, page 8, lines 8-9. These objects are implemented using standard distributed object management techniques (e.g., CORBA, DCOM). Specification, page 8, lines 9-10.

Interdependencies or relationships within a model are defined using function objects. Function objects provide emergent behavior by providing solvable expressions that relate data objects and function objects. The expression may be thought of as a function with a plurality of inputs and output objects, which is evaluated by a solver. Thus, by generating, publishing references to and subscribing to these function objects and data objects, networks of linked function objects and data objects emerge to form an emergent model.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Glass (U.S. Pat. No. 6,629,128).

Glass provides an improved system for distributed processing in a network (a distributed object management system) (col. 3, lines 62-67). Glass explains that “[c]urrently, a system developer must anticipate all necessary remote proxies and create the remote proxy classes” (col. 6, lines 35-36). Moreover, the “remote proxy classes must be kept in sync with the subject classes as the subject classes and interfaces are modified” (col. 6, lines 43-45). In response to these shortcomings, Glass provides a system which dynamically generates remote proxy classes whenever they are needed at runtime to enable a client system to manipulate data and services resident on a server system. Specifically, Glass provides a remote proxy generator, residing in the object request broker of the server system, which instantiates the remote proxy class to create a remote proxy object through which a client system may access data and services resident on a server system. The remote proxy objects are created in response to requests by client systems to server systems.

Glass, however, fails to teach an emergent model including one or more models that describe the behavior of a system and/or evaluate the system. In particular Glass fails to teach generating function objects that define interdependencies within a model by providing solvable expressions that relate data objects and/or function objects. Glass only provides a way for a client to access data and services resident on a server system. Glass does not provide function objects that include solvable expressions relating other data objects and/or function objects. Claim 1 has been amended to include these limitations which Glass does not teach.

Claim 1 has further been amended to make clear various other aspects of Applicants’ invention. The limitation “invoking methods on data objects and/or function objects when data objects and/or function objects require information” has been added and is supported by the Specification at page 9, lines 15-24 and page 23, lines 17-19. The limitation “in a central location on a single computing device” has also been added and is supported by the Specification at page 17, line 29 through page 18, line 2. The remaining amendments are also supported by the Specification.

Because Glass does not teach, suggest or otherwise make obvious every claim limitation of now amended Claim 1 (e.g., “the emergent model including one or more models ... that describe behavior of a system and/or evaluate the system, ... at least some of the data objects and/or function objects being model inputs and/or model outputs, at least some of the function

objects ... providing solvable expressions that relate data objects and/or function objects”), Applicants respectfully request that the rejection of Claim 1 be withdrawn. Since Claims 2-10 depend from base Claim 1, Applicants respectfully request that the rejection of these claims be withdrawn for at least the same reasons supporting withdrawal of the rejection of base Claim 1.

Since base Claim 11 has identical claim limitations to Claim 1 discussed above, Applicants respectfully request that the rejection of Claim 11 be withdrawn. Since Claims 12-20 depend from base Claim 11, Applicants respectfully request that the rejection of these claims be withdrawn for at least the same reasons supporting withdrawal of the rejection of base Claim 11.

Information Disclosure Statement

A Supplemental Information Disclosure Statement (IDS) is being filed concurrently herewith. Entry of the IDS is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims (Claims 1-20) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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